SECTION II
ALTERNATIVES

2.1 DEVELOPMENT AND SCREENING OF ALTERNATIVES

2.1.1 General

A range of alternatives was developed for this STH 26 project corridor. Each of these alternatives was evaluated for its ability to meet the purpose and need requirements of this project. In accordance with the Council on Environmental Quality (CEQ) guidelines only those feasible and prudent alternatives that passed the screening process were selected for detailed evaluation in this EIS. Those alternatives that did not meet the purpose and need requirements of this project are also described in this section.

Although the proposed solutions address the entire project corridor, alternatives were developed for each of the corridor's three study segments: the south segment (Janesville to Fort Atkinson), the central segment (Fort Atkinson to Johnson Creek), and the north segment (Johnson Creek to Watertown).

Section 2.1 focuses on the process used to develop and screen alternatives. It discusses the scoping and screening processes, stages in the alternative development process, and environmental and other geographical features that influence decision making within each segment of the project study area.

The study process consisted of a preliminary alternative development stage and a detailed study stage. The preliminary stage identified a broad range of alternatives and identified those that met the purpose and need requirements for this project and merited further study. The detailed study stage was a thorough evaluation of those alternatives. Table 2.1.4 shows the improvement alternatives that were developed and, if applicable, the stage in the screening process at which a particular alternative was dismissed from further consideration.

Section 2.2 focuses on the range of alternatives considered, and Section 2.3 focuses on the alternatives retained for detailed study. The impacts of each alternative are presented and compared, consistent with the level of detail used for the analysis at each stage of the development process.

2.1.2 Scoping Process

2.1.2.1 Agency Coordination

Preliminary alternatives were developed based on concerns identified during the scoping process, involving early coordination with federal and state agencies and Native American tribes. Agencies expressing an interest or concerns with the project included: U.S. Department of Interior (DOI) Fish and Wildlife Service (FWS); DOI National Park Service (NPS); U.S. Environmental Protection Agency (EPA); U.S. Corps of Engineers (COE); Wisconsin Department of Natural Resources (WDNR); Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP); State Historical Society of Wisconsin (SHSW). Native American Tribes expressing an interest or concerns with the project include Ho-Chunk Nation, Menominee Indian Tribe of Wisconsin, Forest County Potawatomi Community, and Oneida Tribe of Indians.

Principal agency or Native American concerns identified to date (not necessarily in order of priority) are as follows:

- Avoid the Storrs Lake Wildlife Area east of Milton.

- Wetland impacts must be minimized and unavoidable impacts mitigated. In particular, avoid fragmenting the large wetland area east of Jefferson.

- The federally listed threatened Prairie White-Fringed Orchid occurs in the project study area, generally within the watershed of Otter Creek. Minimizing impacts to potential habitat of this plant is important.

- State-listed threatened or endangered species may be present in the study area and need to be investigated.

- Avoid impact to the Milton House, a National Historic Landmark. Avoid and/or minimize impacts to area historic architectural sites.

- Minimize impacts to Native American cultural resources (archaeological sites) and avoid impacts to significant sites. The area between the Crawfish and Rock Rivers west of Jefferson was identified by SHSW as an area of concern.

- Development of the Ice Age National Scenic Trail, a component of the National Trails System, is intended for the area between Janesville and Milton. A trail crossing of STH 26 at Milton needs to be accommodated.

- The Glacial Drumlin State Trail includes a segment of abandoned railroad right-of-way that received Land and Water Conservation Fund (LWCF) funds.

- Agricultural impacts should be minimized. An Agricultural Impact Statement (AIS) must be prepared for the project.

- The COE wishes to participate as a cooperating agency on the EIS.

2.1.2.2 Public Involvement

The overall STH 26 corridor project is divided into three study segments to facilitate development of alternatives and address local concerns and interests. The three study segments are shown in Section I on Figures 1.2.2.1, 1.2.2.2, and 1.2.2.3 and are as follows:

South Segment - Janesville to Fort Atkinson (IH 90 to Fort Atkinson Bypass)
Central Segment - Fort Atkinson to Johnson Creek (Fort Atkinson Bypass to Baneck Lane)
North Segment - Johnson Creek to Watertown (Baneck Lane to STH 60-East)

Public involvement has been on-going in the form of meetings, telephone conversations, and written comments. In June 1999, Public Information Meetings were held in Milton, Jefferson, and Watertown. The range of preliminary alternatives was shown and described to the public during these meetings. In addition, numerous meetings have been held with officials from individual towns and cities in the study area, and a briefing was provided to the Jefferson County Board. Based on input received at these meetings, refinements were made to the preliminary alternatives.

Each of the three study area segments has a Study Committee composed of members nominated by communities likely to be impacted by corridor alternatives to represent their community. Each committee

contains a mix of elected officials, technical staff, and other representatives. Meetings with each of the Study Committees were informal working sessions set up to encourage local input and assist data gathering for this study. The Study Committees were not official voting forums, and they did not replace any official action taken by a municipality. Regular public involvement meetings, including public information meetings, were held in addition to the Study Committee meetings.

Discussion issues at the Study Committee meetings included project purpose and need, existing and forecasted traffic volumes, potential solutions including through town alternatives, typical roadway sections, land use, access points, findings from written comments received at the public information meetings, historic preservation, long term corridor preservation, and the project enumeration process of the Transportation Projects Commission (TPC). Seven Study Committee meetings in each segment were held in 1999 and 2000 in addition to two corridor-wide local officials meetings.

Many of the preliminary alternatives were either modified or dismissed based on discussions with the study committees, impacts associated with the alternatives, inability to meet the purpose and need requirements of this project, and/or comments received from the June 1999 public information meetings. The resulting alternatives were shown at a second series of public information meetings held in Milton, Jefferson, and Watertown in January 2000, and were discussed with the study committees. The detailed study alternatives were selected after these meetings.

Following the publication of the Draft EIS in July 2000, one public series of hearings and five additional public information meetings were held. Based upon the input received at these meetings and on input received from various regulatory agencies and units of government, a Preferred Alternative was selected in each of the three project segments.

2.1.3 Screening Process and Methodology

2.1.3.1 Screening Process

The purpose of the project is to provide a safe and efficient transportation corridor having national, state, regional and local importance for STH 26 while minimizing adverse environmental disturbances. The screening process involved consideration of whether a specific alternative would meet the identified purpose and need requirements for this project. The primary requirements are that the alternative must:

- Provide a transportation system consistent with state planning efforts and the intended highway function as a route of national, state, regional and local importance.
- Provide capacity and an adequate level of service for current and projected traffic volumes, including trucks.
- Reduce congestion and travel time.
- Improve the safety of the highway by reducing traffic conflicts and the potential for crashes.
- Provide relatively unimpeded traffic flow with an operating speed of 55-65 mph (89-105 km/h) in rural areas, and a substantial reduction in the number of existing access points in urban areas to maintain a minimum operating speed of 40 mph (65 km/h).

- Avoid or minimize adverse environmental disturbances, including impacts to wetlands and other natural resources, and cultural resources such as historical and archaeological features.

- Minimize impacts due to right-of-way acquisition and relocation.

- Support local community needs and interests, and be consistent with local development patterns.

Only the alternatives that met the purpose and need requirements of this project and minimized the associated impacts were selected for detailed evaluation in this EIS. All alternatives consist of four-lane divided rural roadways. Freeway access control standards (access allowed only at interchanges) would be implemented along the bypass portions of the route. It is further proposed for the rural portions of STH 26 between the bypasses that expressway access standards be applied. This would mean that public road at-grade intersections and private driveways would be allowed at safe locations that meet spacing guidelines. It would be the goal of WisDOT to minimize the number of at-grade public intersections and private driveways. This would be accomplished by consolidation, grade separation of certain public roads from STH 26, or constructing an interchange at selected busy intersections. Following the selection of Preferred Alternatives in 2002, WisDOT undertook a study with local units of government and adjacent property owners to examine access modifications needed for long-term STH 26 corridor preservation.

The No-Build Alternative is also evaluated in detail, as required by 40 CFR 1502.14 of the CEQ regulations, because it serves as a baseline to evaluate the improvement alternatives. The improvement alternatives selected for detailed evaluation consist of eight alternatives, two in the south segment, four in the central segment, and two in the north segment. These detailed study alternatives are further described in Section 2.3.

2.1.3.2 Methodology

In the preliminary stage, an aerial photo base map showing environmental and other geographic features of concern was developed for each of the three study segments. Mapped information included wetlands; 100-year floodplain boundaries; rivers, streams, and lakes; property lines; corporate boundaries; roadway names and boundaries; parks, cemeteries, and woodlands; and churches, schools, airports, mobile home parks, and industrial land. Additional major constraints were mapped as they were identified.

Land area impacts (farmland, wetland, etc.) were calculated based on a constant 400-foot (122 m) wide corridor during the preliminary alternative development stage. For the detailed study stage, area calculations were based on a constant 400-foot (122 m) wide corridor in bypass areas, and approximate right-of-way lines (minimum corridor width of 250 feet (76 m)) reflected by roadway slope intercepts obtained from computer modeling along the existing corridor.

Land areas were classified based on interpretation of the aerial maps. Efforts were made to obtain additional information directly from impacted property owners or farm operators.

Wetlands were delineated based on WDNR wetland inventory maps, SCS maps, and field review and verification. Floodplains were located using Flood Insurance Rate Maps (FIRM) from existing flood insurance studies.

An assessment of floodplain impacts west of Jefferson was made using the HEC-RAS (Hydrologic Engineering Center – River Analysis System) hydraulic analysis program. Cross sections for the

HEC-RAS analysis were taken from a two-foot (0.6 m) contour map to closely approximate the floodplain geometry.

An archive and literature search, and a Comprehensive Historic Survey were completed to identify architectural sites potentially eligible for the National Register. A Determination of Eligibility (DOE) was completed on rural architectural sites to determine actual eligibility.

An archive and literature search was completed during the preliminary alternative development stage to identify known archaeological sites in the study area. Following this record search, a Phase I multiple corridor survey methodology was undertaken, designed to sample areas of high archaeology site probability to ascertain the presence or absence of significant archaeological sites. A Phase I archaeological investigation has been conducted on the Preferred Alternatives to identify potential archaeological sites requiring further testing in order to determine eligibility for the inclusion on the National Register. Phase II investigations were completed on the potentially eligible sites.

A Phase I hazardous material investigation was conducted to identify potential contaminated sites in the study area.

A qualitative analysis was prepared to evaluate land use and socioeconomic issues. An expert panel of individuals with particular land use knowledge in the study area was used in the detail study stage to further identify concerns and evaluate secondary impacts.

Cost was estimated on a per mile basis that depended upon the types and lengths of roadway sections within a particular alternative. A unit cost per interchange, and a lump sum cost for structures over side roads, railroads, streams, or rivers was also added to the initial construction cost estimate. A 15 percent engineering and contingency cost was added to the construction cost subtotal.

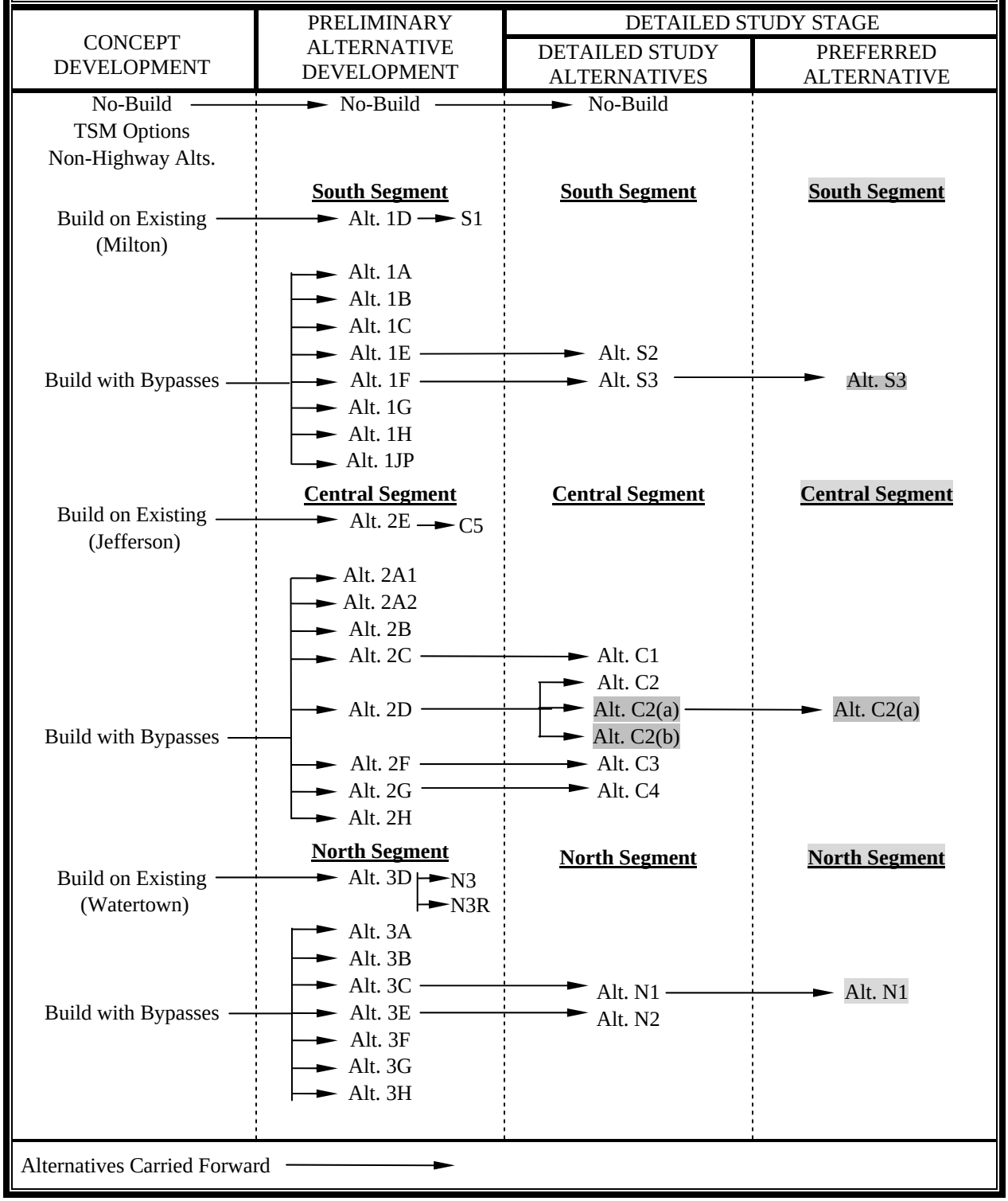
Public comment was solicited at public meetings as well as smaller meetings with study committees, property owners, and public officials. Notices were sent to potentially affected property owners informing them of upcoming public information meetings. Notices of public information meetings were placed in area newspapers and sent to area radio stations. A newsletter describing the alternatives and encouraging public comment was mailed to approximately 2000 residents in the project area.

Field reconnaissance was conducted to permit interested regulatory agencies to review the corridor and to view potentially impacted environmentally sensitive areas. Participants included representatives of FHWA, USEPA, US Army COE, WDNR, and State Historical Society of Wisconsin.

2.1.4 Stages of Development

The process that led to the selection of the Preferred Alternatives has been divided into two distinct stages: preliminary alternative development and detailed study stage. A schematic overview of the process is shown in Table 2.1.4. The purpose of the preliminary stage was to identify a broad range of alternatives, and to study those preliminary alternatives in sufficient detail to identify those reasonable alternatives meeting the purpose and need requirements for the project while minimizing environmental disturbances that merited detailed study in the next stage. The goal of the detailed study stage was to provide a more thorough evaluation of a range of those alternatives, thus providing the basis for selection of a Preferred Alternative.

TABLE 2.1.4
ALTERNATIVE DEVELOPMENT PROCESS SCHEMATIC



2.1.4.1 Preliminary Alternative Development Stage

For alternative development and evaluation, the project was divided into three study segments (south, central, and north) as described and shown in Section I. Alternatives were modified and refined during the preliminary stage. Some preliminary alternatives were dismissed entirely as not meeting the purpose and need requirements of this project or because other prudent and feasible alternatives with less significant adverse environmental disturbances existed. In some cases new alternatives were identified during the course of preliminary screening and evaluation.

Comments on the preliminary alternatives were actively solicited from public officials and the general public. Preliminary alternatives were presented at Study Committee meetings that included representatives of Rock, Jefferson, and Dodge Counties; the Cities of Janesville, Milton, Fort Atkinson, Jefferson, and Watertown; the Village of Johnson Creek; and the Townships of Harmony, Milton, Koshkonong, Jefferson, Aztalan, Farmington, Watertown, Milford, Shields, Emmet, and Clyman. The same preliminary alternatives were presented at public information meetings held during June 1999 in Milton, Jefferson, and Watertown. Refined preliminary alternatives, including several through-town alternatives, were studied for a longer period of time and were presented to the public at the January 2000 public information meeting.

In addition to public comment, the preliminary alternative development stage included engineering analysis, environmental investigation, and agency coordination. Information from all four of these sources was used in determining which preliminary alternatives merited being carried forward, modified, or dismissed. Preliminary alternatives, including those dismissed, are discussed in Section 2.2.

2.1.4.2 Detailed Study Stage

Following the preliminary alternative development stage and public comment, ten improvement alternatives plus a No Build alternative were carried forward for detailed study. The ten improvement alternatives address the purpose and needs of the entire project corridor, and will be discussed in terms of the corridor's three study sections. In the south segment, two improvement alternatives were carried forward for detailed study. The two alternatives are the same in their alignment location except near the City of Milton where two east side options exist. South of Milton both alternatives generally follow the existing STH 26 roadway. North of Milton, the two alternatives join the existing STH 26 roadway north of CTH N. In the central segment, six improvement alternatives were carried forward for detailed study. The alternatives are the same in their alignment location except near the City of Jefferson where six bypass options exist, including four west and two east locations. North and south of Jefferson the six alternatives generally follow the existing STH 26 roadway. In the north segment, two improvement alternatives were carried forward for detailed study. The alternatives are the same in their alignment location except near the City of Watertown where two bypass options exist, including one near west and one near east location. North and south of the Watertown both alternatives generally follow the existing STH 26 roadway.

At the outset of this study, two sections within the 48-mile (77-km) corridor were found to be sufficient for the projected traffic volumes and therefore were not anticipated to require additional capacity improvements under this study. The first section is in the south segment between Janesville and Milton from CTH Y to just south of STH 59-East. This section was improved in 1999 as a four-lane divided highway with expressway type access. Additional capacity improvements are not planned for this section, but access modifications are planned that will permit the route to operate safely as traffic volumes increase. Included are side road closures, converting of at-grade intersections to interchanges, and placement of bridges over STH 26 for local mobility. The second section is in the central segment at the

Village of Johnson Creek from CTH Y to Baneck Lane. This section was improved in 2001-2002 as a four-lane divided highway with access management. This section will be further studied for possible intersection and access improvements that could improve safety and mobility.

Detailed study alternatives were evaluated applying the same criteria used in the preliminary stage. Many of the factors were evaluated in greater depth or with additional available information. Engineering analysis was performed for the alternatives to define approximate right-of-way requirements as the basis for calculating land impacts. Impacts were evaluated for the No-Build Alternative, which serves as a baseline for comparison of build alternatives. Detailed study alternatives are discussed in Section 2.2.

2.1.5 Description of Environmental and Geographical Features

This section describes the existing environmental and geographic features that influenced decision making in each study segment.

2.1.5.1 South Segment

The existing roadway between the City of Janesville and the City of Milton lies adjacent to land that is a mixture of commercial and residential development and farmland. Land between these two communities is planned for future development growth. Within the City of Milton, major features along STH 26 include numerous residential and commercial properties, ten side road intersections, and 54 driveway access points. Also, several historic structures are within Milton adjacent to the STH 26 corridor including the Milton House (shown here), a National Historic Landmark (NHL), three historic buildings listed on the National Register of Historic Places (NRHP), and five additional historic structures eligible to be on the NRHP (see Figure 2.2.2.4). In addition, South Goodrich Park, North Goodrich Park, East Elementary School, Milton East Cemetery, and residential and commercial properties are adjacent to the existing roadway. The Wisconsin and Southern Railroad tracks cross existing STH 26 at grade just south of the Milton House. North of Milton, existing STH 26 crosses Otter Creek at the intersection with CTH N. North of Otter Creek, wetlands are located east of the roadway; Otter Creek and the associated wetlands in this area are referred to as Otter Creek Springs and have been identified by WDNR as an unprotected natural area. An abandoned railroad corridor converted to a recreation trail is located along the west side of the highway.

Milton House

Major features west of STH 26 include Mud Lake, Clear Lake and Grass Lake and their associated wetland complexes northwest of Milton, Forest Lake Park in the northwest corner of Milton, Lake Koshkonong, and numerous rural residential subdivision developments. A population of the prairie white-fringed orchid, a federally listed threatened species, has been identified near Lake Koshkonong within the Otter Creek watershed.

Major features east of STH 26 include Bowers Lake, Storrs Lake, and the Storrs Lake Wildlife Area, the City of Milton Industrial Park, rural residential subdivisions, and two golf courses. Wetlands and a branch of Otter Creek are located east of the Storrs Lake Wildlife Area.

2.1.5.2 Central Segment

The existing STH 26 corridor follows the Fort Atkinson Bypass west of the city and leaves the Fort Atkinson area traveling adjacent to relatively flat farmland before entering the City of Jefferson. A Union Pacific Railroad corridor parallels the western side of the highway. The Fort Atkinson Airport, a small regional airport, is located between the cities of Fort Atkinson and Jefferson along the eastern edge of STH 26. Through the City of Jefferson and along existing STH 26 major features include numerous industrial, commercial, and residential properties, 33 side road intersections, and 65 driveway access points. Also within Jefferson is the Main Street Commercial Historic District (shown below and on Figure 2.2.3.6). This NRHP district encompasses over 40 structures on 12 blocks in Jefferson's traditional downtown. Twenty-five of the contributing buildings are located adjacent to existing STH 26. Eight other

Jefferson's Main Street Commercial Historic District

potentially eligible historic structures, in addition to the Main Street Commercial Historic District, are adjacent to existing STH 26 in Jefferson. Between Jefferson and Johnson Creek the existing corridor travels through relatively flat terrain with some farmland and rural residential development adjacent to the roadway. Major features along this segment of the highway include the Glacial Drumlin State Trail, small wetlands and woodlots, and Bicentennial County Park located east of the roadway about one-mile (1.6-km) south of CTH Y.

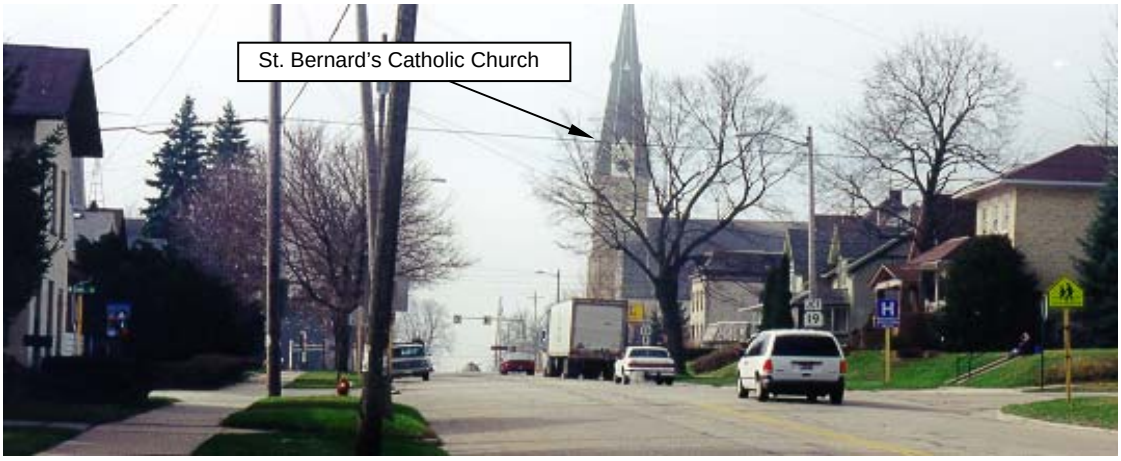
Major features west of STH 26 include farmland, the Crawfish and Rock Rivers, and scattered wetlands. Numerous archaeological sites are within the area between the rivers, and a floodplain surrounds the Crawfish River near Jefferson.

Major features east of STH 26 include the Rock River, St. Coletta School, farms and residential properties, and numerous archaeological sites. Wetlands and woodlots are located throughout the eastern edge of Jefferson as are various residential and farmland properties. A large wetland area is located east of CTH Y. Between the city corporate limits and this wetland is the St. Coletta of Wisconsin property, an adult service agency that provides for the needs (schooling, medical care, training, work, etc.) of adult developmentally disabled individuals. Input from the St. Coletta community indicates a need for a sidewalk along the south side of USH 18 for pedestrian usage between the main school facility on CTH Y

and their group homes within the city of Jefferson. The original school site on the corner of USH 18 and CTH Y is listed on the NRHP as the St. Coletta School Historic District. St. Coletta also owns and operates an adult nursing home complex known as Alverno Cottages along CTH Y just north of USH 18. The Alverno Cottages are also eligible for the NRHP. Northeast of Jefferson is the Ladish Malt Company, a large industrial complex where malt is manufactured for beer. The buildings are surrounded by support facilities including a railroad spur and sewage lagoons. Several farms are located east of Jefferson.

2.1.5.3 North Segment

The existing STH 26 corridor travels along land from Johnson Creek to Watertown that has a mix of farmland, residential, and commercial properties located adjacent to STH 26. The Watertown airport is located south of the city and just east of STH 26, and has access off STH 26. In Watertown, STH 26 crosses over the Rock River and passes under a Canadian Pacific Railway bridge. Through the City of Watertown, major features include numerous residential, commercial, and historic properties adjacent to the roadway, 26 side road intersections, and 109 driveway access points. Two separate historic districts are located north and south of STH 19 adjacent to STH 26. These historic sites are identified as the North Washington Historic District with 35 buildings along existing STH 26 (see photo below and Figure 2.2.4.4), and the South Washington Historic District with 14 buildings adjacent to existing STH 26. In addition to these two historic districts, four other historic sites, including the St. Bernard Catholic Church



Watertown's North Washington Historic District

complex, are adjacent to existing STH 26. Three other historic sites, including a Chicago & Northwestern Railroad depot, Maranatha Baptist Bible Church, and an industrial building, are located adjacent to the Union Pacific rail corridor west of existing STH 26 (see Figure 2.2.4.5). St. Henry Cemetery is located just east of STH 26 in the northern part of town near the entrance to the Watertown High School. An interchange with STH 16 is located just north of the city. This interchange would require reconstruction with any alternative proposed.

North of the STH 16 interchange are numerous side road intersections with local and CTH roads. Major features include adjacent farmland and rural residential properties. Slight's Standard Filling Station, a historic gas station eligible for the NRHP, is located on the west side of STH 26 at Kiln Road just north of Watertown. The existing highway travels within the hill area of the local drumlin terrain and all of the alternatives would impact adjacent property due to roadway slopes required in this area. STH 16 separates from STH 26 at the STH 60-West interchange approximately eight miles (12.9 km) north of Watertown; the existing roadway then travels under a narrow railroad bridge before continuing on to STH 60-East and

points beyond. The interchange at STH 60-West may need reconfiguring with any alternative and the railroad bridge will require reconstruction with all alternatives.

Major features west of STH 26 include farmland, the Rock River, and some scattered woodlots and wetlands. Bridges over three railroad crossings and grade separations of local roads would be required. A large dairy farm operation exists just west of the city limit edge of Watertown.

Major features east of STH 26 include farmland, the Rock River, and an electrical substation located in the southeastern part of Watertown. Along the eastern side of Watertown is the existing STH 16 bypass. An interchange would be required with STH 16 to maintain access to the local hospital east of Watertown. Due to the location of the Rock River with STH 16, any interchange may require realignment of STH 16 at that point. An east side corridor also requires bridges over two railroad crossings as well as a bridge over Silver Spring Creek. East of Watertown there are wetland and woodlot habitats within the drumlin areas. Drumlin fields and associated glacial features such as those located in this area are found in very few other locations worldwide and are geologically significant. Because of the drumlins, roadway earthwork requirements would impact adjacent farmland and residential properties.

2.2 ALTERNATIVES CONSIDERED

2.2.1 Range of Alternatives Considered

Project development included consideration of the following improvement concepts:

2.2.1.1 No-Build Alternative

Under the No-Build Alternative, improvements to the STH 26 corridor would primarily consist of maintenance activities or spot improvements that attempt to maintain current service levels. Generally, the rural section of roadways, including the Ft. Atkinson bypass, would remain a two-lane rural roadway with no change in access. The exception to this is the rural section between Janesville and Milton, which was reconstructed as a four-lane divided rural highway in 1999. Urban sections of roadway in Milton, Jefferson, and Watertown (north of STH 19) would remain as two-lane urban roadways with some parking and turn lanes. The urban section of Johnson Creek between CTH Y and Baneck Lane was reconstructed as a four-lane divided roadway in 2001-2002, and the urban section of Watertown south of STH 19 was reconstructed as a four-lane urban roadway in 2003. There would be minimal change in access in any of the urban communities.

Under this alternative, the existing roadways in the urban communities would become more congested than today. This congestion would cause hardship to local mobility, limiting the public's access to businesses, schools, and other parts of the community. Because STH 26 is the major north-south route in Jefferson and Watertown, police, fire, ambulance and school bus service, increased congestion in these areas would hinder these services. As development occurs in and around the corridor, an unimproved two-lane roadway in Milton and Jefferson and the existing 4-lane roadway in Watertown would not be able to accommodate growing traffic. Additionally, the existing 4-lane expressway access roadway between Janesville and Milton will experience traffic slowdowns and will have a greater potential for crashes. STH 26 would not function effectively as a regional highway, and regional traffic would increasingly use less congested local and county roads. The utility of STH 26 for transporting goods to regional, statewide, and national destinations would decline. The No-Build Alternative, while having fewer environmental impacts such as land acquisition and relocations, would not be consistent with the *Corridors 2020* plan and its intended highway function as a route of national, state, regional and local importance.

In summary, the No-Build Alternative would not meet the purpose and need requirements of this project. It is carried forward as a detailed study alternative to serve as a baseline for comparison of Build Alternatives and for evaluation of their environmental impacts.

2.2.1.2 Traffic System Management

Traffic system management measures are generally applicable only in larger urban areas where traffic signal timing, designated use lanes, and other measures can have a substantial effect. Such measures are not reasonable for this project with smaller communities separated by rural areas, and do not address the purpose and need requirements for the project. For this reason, this alternative was dismissed from further consideration.

2.2.1.3 Non-Highway Alternatives

Mass Transit

Mass transit alternatives in the form of bus, light rail, and commuter rail were considered early in the project. City mass transit services are provided in the City of Janesville and in the City of Watertown. The Janesville Transit System operates six fixed routes within the city. The Watertown Transit System operates a shared ride taxi service with a fleet of seven vehicles within the city.

While Janesville has a population of 59,498, Milton's population is 5,132, Ft. Atkinson's population is 11,621, Jefferson's population is 7,338, Johnson Creek's population is 1,581, and Watertown's population is 21,598 (US Census Bureau, 2000).

Mass transit is typically considered to be an effective transportation solution in larger urbanized areas with a population of more than 200,000 (FHWA Technical Advisory T 6640.8A). Light rail and commuter rail transit service generally involves from 2,000 to 20,000 passengers per hour. The density and size of the population in the communities served along the 48-mile (77-km) STH 26 corridor, and the rural agricultural nature of the surrounding area, make bus or commuter rail service infeasible. Such alternatives would not meet the purpose and need requirements for this project and therefore were dismissed from further consideration.

Passenger Rail and Inter City Bus

Passenger heavy rail service involves trains at travel speeds similar to Amtrak with limited stops. Rail passenger service between Janesville and Chicago was started in April 2000. The Lake County Limited leaves Janesville at 6:00 am daily and makes a return trip leaving Chicago at 8:15 pm. In addition to passengers, mail and express freight can be accommodated. Amtrak is responsible for the service, and the trains run on tracks owned by the Wisconsin and Southern Railroad Company. Amtrak passenger service also passes through Watertown on the Canadian Pacific Railway but does not stop.

Wisconsin, along with a consortium of other Midwest states and the federal government is planning a network of high-speed passenger rail lines extending from a Chicago hub. Potential station sites include Milwaukee, Watertown and Madison.

Inter city bus service on STH 26 is currently limited to charters. Badger Coaches, Inc. (also known as Badger Bus) provides eight daily buses per direction between Madison and Milwaukee on IH 94. Van Galder Bus Company operates 19 daily buses in each direction on IH 90 between Madison and O'Hare

Airport in Chicago, each with a schedule stop in Janesville. Van Galder Bus Company also operates 4 daily bus trips between Madison and downtown Chicago, each with a scheduled stop in Janesville. Greyhound provides 5 daily bus runs on IH 90 between Madison and Rockford, Illinois, with three of them stopping in Janesville. Greyhound also operates 5 daily buses on IH 94 between Madison and Milwaukee, with two of them being non-stop service.

Passenger rail and inter city bus are not practical for serving existing and future traffic demand within the STH 26 corridor due to the density and size of the population in the communities served along the 48-mile (77 km) route, and rural agricultural nature of the surrounding area. Such alternatives would not meet the purpose and need requirements for this project and therefore were dismissed from further consideration.

STH 26 does function as the major connector to these services for Milton, Ft. Atkinson, Jefferson, Johnson Creek, and Watertown. A park-and-ride lot was constructed in 2001-2002 for STH 26 and IH 94 at Johnson Creek, with provisions made to accommodate inter city bus service. Planning for additional park-and-ride facilities in the Janesville area is also being considered under a separate study.

Freight Rail

Development of a corridor to handle freight rail was considered early in the project. Freight rail service currently exists between Clyman Junction and Jefferson as part of the Union Pacific Railroad rail network in Wisconsin. The rail line from Fort Atkinson to Janesville was abandoned in 1975, and a good portion of the corridor south of Jefferson has been developed into a recreational trail. The rail line from Fond du Lac to Clyman Junction has also been abandoned and now serves as a trail. There are no federal or state programs to finance the construction of new freight rail lines, and it is unlikely that the Union Pacific Railroad would ever extend their branch line from Janesville to Jefferson using their own capital resources since they abandoned this link in 1975.

WisDOT's Translinks 21, a multimodal transportation plan for Wisconsin's 21st century, identifies the need for improving existing rail track infrastructure to improve service levels, increase operating speeds, and enhance rail/highway safety. Multiple rail track corridors exist between the industrial Fox River Valley area, through the Milwaukee area, and into the Chicago area where numerous service connections can be made with major east-west nationwide rail lines. It is unlikely that a new rail line along STH 26 could duplicate the numerous service line connections to the east-west rail lines that currently exist, and thus the service would not be competitive with the existing services. The existing rail lines from the Fox River Valley area to the Milwaukee and Chicago areas, the traditional destination for Wisconsin rail freight to national communities, can handle additional rail freight capacity. This alternative was therefore dismissed from further consideration. The STH 26 corridor serves the needs of truck freight, which typically has more dispersed destinations than rail freight.

2.2.1.4 Preliminary Alternatives

Preliminary alternatives were developed in an attempt to meet the purpose and need requirements for this project, i.e., to establish an effective regional transportation corridor meeting current WisDOT design standards as discussed in section 2.1.3.1. WisDOT's facilities development guidelines indicate that capacity improvement for a two-lane rural arterial roadway should be considered when the ADT reaches 8,700 vehicles. Currently, 90 percent of the rural segments within the 48-mile (77-km) study corridor have traffic volumes exceeding 8,700 ADT. By 2028, almost all rural segments are projected to exceed the 8,700 ADT threshold by two to four times.

In rural areas, each of the preliminary alternatives consists of providing a four-lane divided rural roadway. Several alternative bypasses for Milton, Jefferson, and Watertown were considered as well as through town urban alternatives. Freeway access control standards (access allowed only at interchanges) would be implemented along the bypass portions of the route. Expressway access standards, permitting public road at-grade intersections and private driveways at safe locations that meet spacing guidelines, would be applied to the rural portions of STH 26 between communities. Urban arterial design standards would be considered along urban sections of STH 26 in an attempt to avoid the severe impacts that would result from the construction of a freeway or expressway.

WisDOT's facilities development guidelines indicate that a two-lane urban roadway falls below LOS "C" at 8,000 to 20,000 ADT depending on the design characteristics of the roadway. Milton currently has traffic volumes ranging from 9,700 to 13,800 ADT with about 15 percent trucks. These volumes are estimated to be in the range of 18,500 to 25,000 by 2028. Jefferson currently has traffic volumes ranging from 14,700 to 20,400 ADT with about 14 percent trucks. These volumes are estimated to be in the range of 28,000 to 38,000 ADT by 2028. Watertown currently has traffic volumes ranging from 13,900 to 19,600 ADT with about 15 percent trucks. These volumes are estimated to be in the range of 26,000 to 37,000 by 2028.

If the urban communities are not bypassed, the design standards required to meet this demand in the design year 2028 according to the FDM involves improving the urban segments with a four-lane or six-lane divided cross-section and limiting the amount of access.

Based on criteria in WisDOT's FDM and in AASHTO guidance, an urban arterial includes:

- Side road intersection access limited to signalized intersections spaced at a maximum of 3 per mile to maintain a desirable operating speed of 40-mph (65-km/h).
- Parking prohibited.
- Driveways spaced a minimum of 500 feet (167 m) apart and limited to right-in and right-out access.
- Frontage roads at locations where driveway spacing is too close.
- Right and left turn lanes at all intersections and driveways.

All of the preliminary alternatives were based on the concept of providing a four-lane divided facility, and are discussed below in Sections 2.2.2, 2.2.3, and 2.2.4. Maps of the preliminary alternatives are also provided following the alternative descriptions for each segment in Figures 2.2.2, 2.2.3, and 2.2.4. Tables 2.2.2, 2.2.3, and 2.2.4 summarize the estimated impacts for the preliminary corridor alternatives that were shown at the first Public Information Meeting.

The preliminary alternatives discussed below are a complete range of alternatives considered. Some were carried forward as detailed study alternatives (often with modification), while some were dismissed from further consideration as not meeting the purpose and need requirements of this project or because other prudent and feasible alternatives with less significant adverse environmental disturbances existed. Through-town alternatives for the cities of Milton, Jefferson, and Watertown were studied in greater detail than other preliminary alternatives that were not carried forward. The relationship between the preliminary and the detailed study alternatives is shown schematically in Table 2.1.4.

With the construction of bypasses, the existing STH 26 route in Milton, Jefferson, and Watertown will need minor spot improvements to have adequate capacity to carry the projected remaining traffic volumes at a minimum LOS "D" in 2028, but roadway widening to provide additional through lanes would not be

necessary. Minor improvements would include the addition of turn lanes, signalization, removal of parking, and other transportation safety related improvements.

2.2.2 South Segment (Segment 1)

The south segment preliminary study alternatives are described below. See Figure 2.2.2 for map locations of the preliminary alternatives, and Table 2.2.2 for a summary of estimated impacts.

2.2.2.1 Alternative 1A (Dismissed From Further Consideration)

Alternative 1A was a Milton far west bypass corridor that routed STH 26 along IH 90 from south of Milton to approximately 2-miles (3.2-km) north of CTH M. An additional northbound and southbound lane and wider structures on the median side of existing IH 90 would have been added in this area. From there, the STH 26 corridor would have diverged from IH 90 at an interchange and continued east on new alignment until reconnecting with the existing STH 26 facility near the Rock-Jefferson County Line. This alternative continued north, adding two additional lanes and a median to the existing roadway until connecting with the Fort Atkinson bypass.

Although this alternative offered an efficient truck route connection to IH 90, it would result in STH 26 traveling a short distance on IH 90. This would have conflicted with the purpose of the interstate system, which is for long distance trips; it is not intended to carry local traffic for short distances. Because additional lanes to handle the added STH 26 traffic and a new interchange would have been required on IH 90, this alternative had the highest cost. This route would have impacted additional wetlands along the south side of Lake Koshkonong. A new crossing of Otter Creek west of existing STH 26 would have had a higher potential for impacts to a federally listed threatened species (Prairie White-Fringed Orchid) identified near this location. This alternative had little or no local support because it impacted land use planned for farmland preservation, was located the farthest distance from the City of Milton, offered no access to their industrial park, and local jurisdictions would have incurred increased maintenance costs, as a significant length of existing STH 26 would become a local road. Other preliminary alternatives met the purpose and need requirements for this project with fewer environmental disturbances and less cost. For these reasons, this alternative was not considered prudent and was dismissed from further consideration.

2.2.2.2 Alternative 1B (Dismissed From Further Consideration)

Similar in concept to Alternative 1A, Alternative 1B was a Milton near west bypass corridor that was developed to route STH 26 along IH 90 from south of Milton to approximately 0.6-mile (1-km) south of CTH M. An additional northbound and southbound lane and wider structures on the median side of existing IH 90 would have been added in this area. From there, the STH 26 corridor diverged from IH 90 at an interchange and continued northeast on new alignment, cut through the northwest corner of the City of Milton and through city-owned Forest Lake Park, then reconnected with existing STH 26 near CTH N. This alternative continued north adding two additional lanes and a median to the existing roadway until connecting with the Fort Atkinson bypass.

Similar to Alternative 1A, this alternative offered an efficient truck route connection to IH 90. It also resulted in STH 26 traveling a short distance on IH 90, which would have conflicted with the purpose of the interstate system. Because additional lanes and a new interchange would have been required on IH 90, this alternative had the second highest cost. This route would have crossed through a city park (Forest Lake Park) south of Mud Lake, and therefore would have been subject to Section 4(f) consideration.

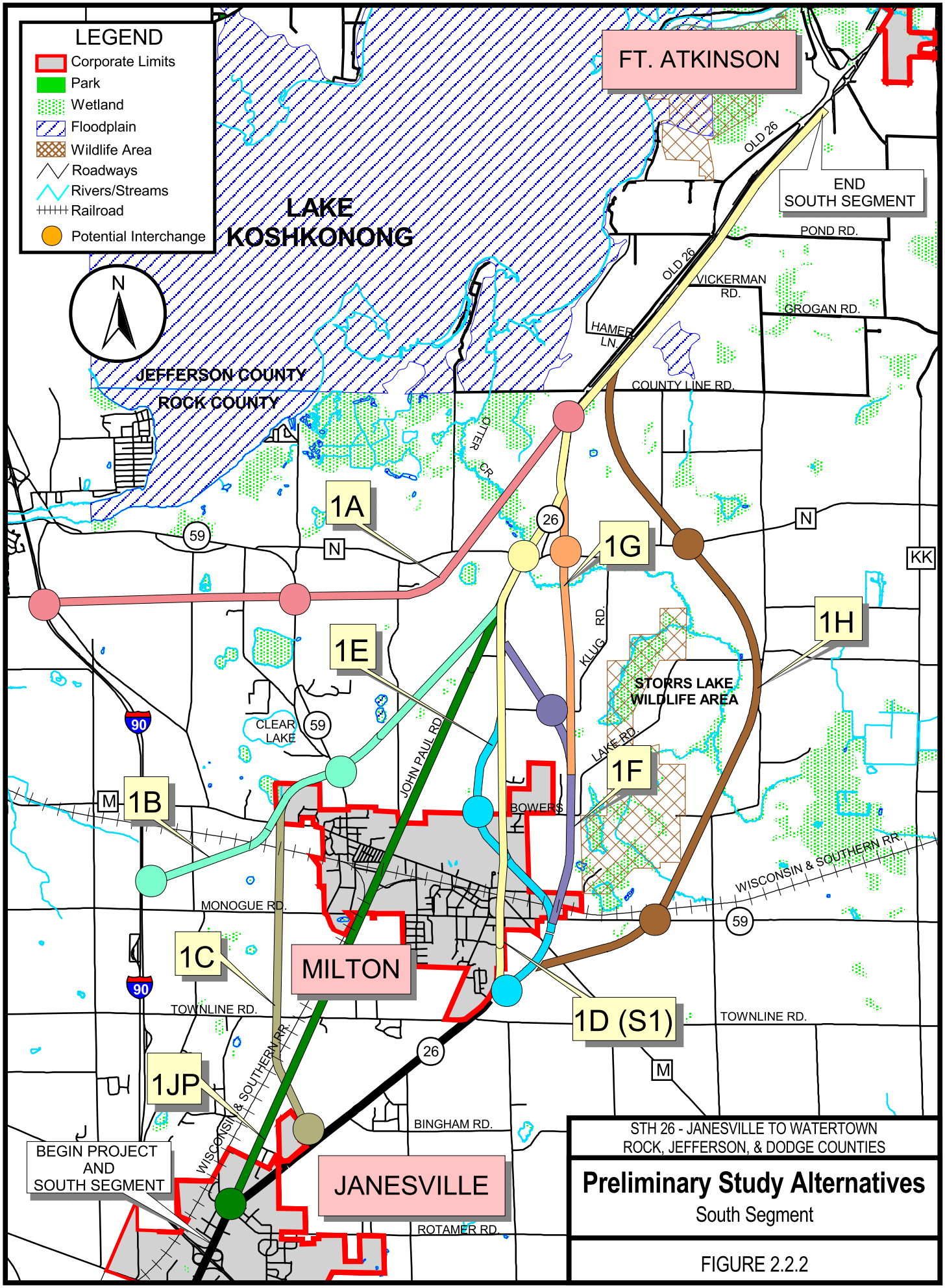

LEGEND
Corporate Limits
Park
Wetland
Floodplain
Wildlife Area
Roadways
Rivers/Streams
Railroad
Potential Interchange
N
LAKE KOSHKONONG
FT. ATKINSON
END SOUTH SEGMENT
OLD 26
POND RD.
VICKERMAN RD.
GROGAN RD.
HAMER LN.
COUNTY LINE RD.
JEFFERSON COUNTY
ROCK COUNTY
CUTLER CR.
1A
1G
1H
1E
1F
1B
1C
1D (S1)
1JP
59
26
N
KK
M
90
KLUG RD.
LAKE RD.
STORRS LAKE WILDLIFE AREA
CLEAR LAKE
JOHN PAUL RD.
BOWERS
WISCONSIN & SOUTHERN RR.
MONOGUE RD.
MILTON
TOWNLINE RD.
BINGHAM RD.
ROTAMER RD.
JANESVILLE
BEGIN PROJECT AND SOUTH SEGMENT
STH 26 - JANESVILLE TO WATERTOWN
ROCK, JEFFERSON, & DODGE COUNTIES
Preliminary Study Alternatives
South Segment
FIGURE 2.2.2

TABLE 2.2.2

SUMMARY OF ESTIMATED IMPACTS FOR PRELIMINARY ALTERNATIVES (June 1999*)

SOUTH SEGMENT: JANESVILLE TO FORT ATKINSON BYPASS

Study Issues	Unit of Measure	Alternatives								
		1A	1B	1C	1D (S1)*	1E (S2)*	1F (S3)*	1G	1H	1JP
Agricultural Issues										
Number of Farms Affected	Each	35	40	44	31	37	33	29	50+/-	32+/-
Farmland Area Converted to Right-of-Way	Acres (Hectares)	292 (118)	339 (137)	411 (166)	173 (70)	228 (92)	206 (83)	251 (102)	396 (160)	151 (61)
Environmental Issues										
Wetland Area Converted to Right-of-Way	Acres (Hectares)	21 (9)	14 (6)	14 (6)	7 (3)	9 (4)	9 (4)	9 (4)	16 (7)	9 (4)
Flood Plain Areas	Low/Med/High	Med	Med	Med	Low	Low	Low	Low	Med	Low
New River/Stream Crossing Locations	Number	1	0	0	0	0	0	1	1	0
Historic Properties	Yes/No	No	No	No	Yes	No	No	No	No	No
Archaeological Potential	Low/Med/High	Med	Med	Med	Low	Low	Med	Med	Med	Low
Endangered Species	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Land Use and Socioeconomic Issues										
Consistency with Municipal Land Use Plans	○⊙●	●	●	●	●	○	⊙	●	●	●
Significant Site Specific Impacts	○⊙●	○	●	●	●	○	○	○	○	●
Farmland Preservation Effect	○⊙●	●	●	●	○	○	⊙	●	●	○
Community Access	○⊙●	●	⊙	⊙	○	○	○	⊙	●	○
Economic Effect on Existing Businesses	○⊙●	●	●	●	○	○	○	⊙	⊙	●
Servicing of Industrial Sites	○⊙●	●	●	●	⊙	○	○	○	⊙	●
Residential-Neighborhood Effect	○⊙●	⊙	⊙	⊙	●	○	⊙	⊙	○	●
Traffic										
-- North of STH 59										
Projected STH 26 2028 Average Daily Traffic (ADT) (1)	Vehicles/Day	9,000	9,500	9,500	18,500	10,000	9,500	9,500	9,500	9,000
Estimated ADT Reduction Through Milton (2028)	Percent	45 - 55	50 - 60	50 - 60	0	55 - 60	50 - 60	50 - 60	50 - 60	45 - 55
Estimated Truck Volume Reduction Through Milton	Percent	75 - 80	75 - 85	75 - 85	0	80 - 90	80 - 90	80 - 90	80 - 90	75 - 80
Number of Thru Lanes Required Through Milton (2)	Existing / Required	2 / 2	2 / 2	2 / 2	2 / 4-div	2 / 2	2 / 2	2 / 2	2 / 2	2 / 2
-- South of STH 59										
Projected STH 26 2028 Average Daily Traffic (ADT) (1)	Vehicles/Day	9,000	9,000	10,500	25,000	N/A	N/A	N/A	13,500	9,000
Estimated ADT Reduction Through Milton (2028)	Percent	30 - 35	30 - 40	40 - 45	0	50 - 60	50 - 60	50 - 60	50 - 60	30 - 35
Estimated Truck Volume Reduction Through Milton	Percent	75 - 80	75 - 85	75 - 85	0	80 - 90	80 - 90	80 - 90	80 - 90	75 - 80
Number of Thru Lanes Required Through Milton (2)	Existing / Required	2 / 2	2 / 2	2 / 2	2 / 4-div	2 / 2	2 / 2	2 / 2	2 / 2	2 / 2
Other Issues										
Total Length	Miles (km)	15.2 (24.5)	14.6 (23.5)	13.8 (22.2)	13.6 (21.9)	14.2 (5.7)	14.2 (22.9)	13.9 (22.4)	15.0 (24.1)	13.1 (21.1)
Total Area Converted to Right-of-Way	Acres (Hectares)	340 (138)	370 (150)	453 (183)	191 (77)	333 (135)	353 (143)	398 (161)	467 (189)	305 (123)
Relocations (Business/Residential)	Each	23	33	40	85+/-	39	40	33	10	110+/-
Preliminary Cost (1999 Dollars)	Million $	$55	$51	$48	$39	$40	$41	$42	$49	$46

* Impacts shown in chart were computed in June 1999 for the preliminary alternatives. Impacts may be different in other charts due to additional information known at a later date. Preliminary Alternative 1D(S1) was studied longer than other preliminary alternatives that were dismissed (See Table 2.2.4.5). Alternatives 1E(S2) and 1F(S3) were carried forward as Detailed Study Alternatives (See Table 2.3.3).

(1) ADT shown is at or near the midpoint of projected ADT range along the bypass alternatives or along the existing alignment alternatives.

(2) Represents the number of lanes along existing STH 26 versus the number of lanes required to obtain LOS "D" along the existing route with the construction of each alternative.

N/A - No access to existing STH 26 south of STH 59 along these alternatives.

○ Note: Symbols represent a relative scale from most beneficial/least negative effect to least beneficial/most negative effect.
⊙ Each preliminary alternative is classified relative to the other preliminary alternatives within the same segment of the corridor.
● least beneficial/most negative effect

Little or no local support for this alternative existed because it would have impacted land use planned for farmland preservation and offered no access to their industrial park. Other preliminary alternatives existed that were considered prudent and feasible, met purpose and need requirements for this project, had fewer environmental disturbances, and cost less. For these reasons, this alternative was dismissed from further consideration.

2.2.2.3 Alternative 1C (Dismissed From Further Consideration)

Alternative 1C was a Milton near west bypass corridor that was developed to avoid routing STH 26 along a portion of IH 90. This alternative would have followed the existing STH 26 corridor from Janesville northeast until about 0.4 mile (0.6 km) south of Bingham Road. The alignment would have then curved north from a proposed interchange and continued on new alignment avoiding rural residential subdivisions. North of CTH M it would have followed the same alignment as Alternative 1B to the north end of the South Segment.

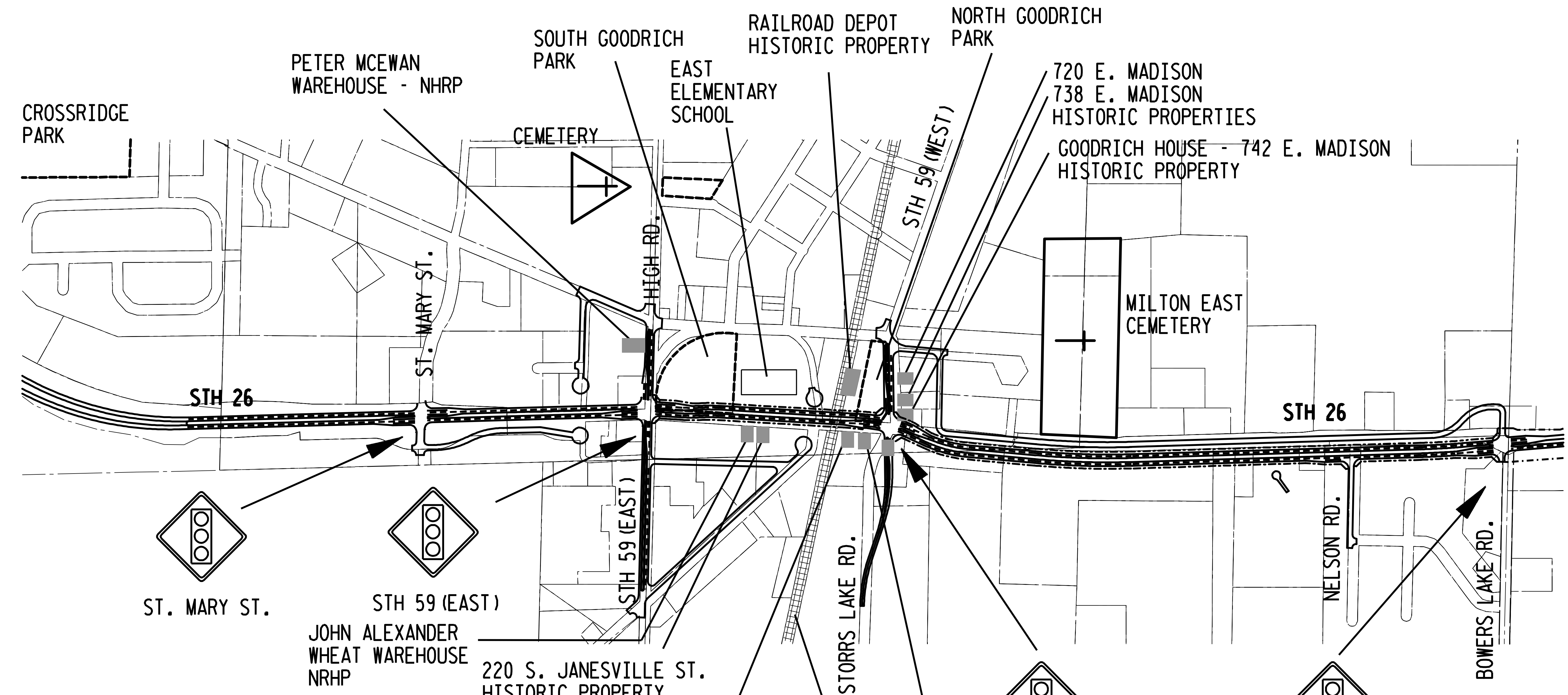
This alternative would not have required the use of IH 90, but due to the length of the route on relocation, it would have had the greatest farmland impacts, approximately 411 acres (166 ha). The estimated cost of Alternative 1C was $8 million higher than other bypass alternatives. This alternative would have required a structure crossing for the proposed Ice Age Trail. It also would have crossed through a city park (Forest Lake Park) south of Mud Lake similar to Alternative 1B, therefore would have been subject to Section 4(f) consideration. It would not have served the Milton industrial park, located on the east side of the city. The location of the south interchange close to the IH 90 and STH 26 interchange ramps and CTH Y would have hampered the free-flow movement of traffic between Janesville and Milton. Little or no local support was been shown for Alternative 1C. Other preliminary alternatives existed that were considered prudent and feasible, met the purpose and need requirements for this project, had fewer environmental disturbances, and cost less. For these reasons, this alternative was dismissed from further consideration.

2.2.2.4 Alternative 1D (Alternative S1) (Dismissed From Further Consideration)

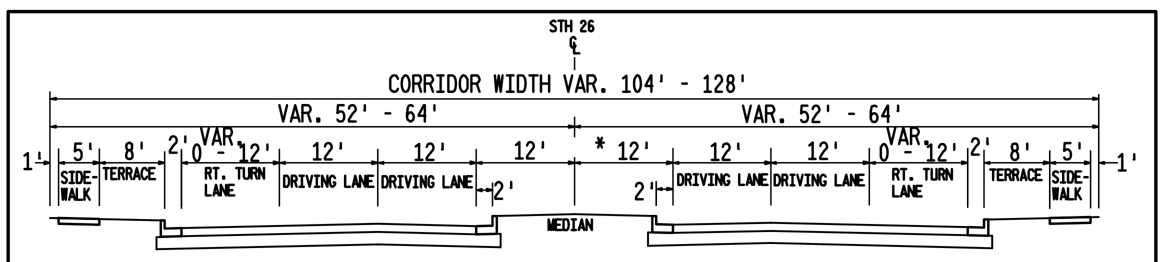
Alternative 1D would have followed existing STH 26 through the City of Milton. Within the city, major features along STH 26 include the Milton House, a National Historic Landmark (NHL), three historic buildings listed on the NRHP, and five additional historic structures eligible to be on the NRHP. In addition, South and North Goodrich Park, East Elementary School, Milton East Cemetery, and residential and commercial property are adjacent to the existing roadway. The Wisconsin and Southern Railroad tracks cross existing STH 26 at grade just south of the Milton House.

From Janesville, Alternative 1D would have followed the existing STH 26 alignment northeast to just south of STH 59-East in the City of Milton, utilizing the rural 4-lane divided roadway constructed in 1999. The four-lane divided roadway would have continued through the City of Milton to STH 59-West as a four-lane urban section with curb & gutter and a median. A location map through Milton is shown on Figure 2.2.2.3). Expansion would have taken place primarily along the west side to avoid direct impact to the Milton House, a National Historic Landmark, as well as two adjacent historic sites. Along the west side, portions of South Goodrich Park, East Elementary School, North Goodrich Park, and six historic sites either on or potentially eligible for the NRHP would have been directly impacted. North of STH 59-West, the alignment would have shifted to the east to avoid a cemetery and businesses located along the west.

MILTON THROUGH-TOWN ALTERNATIVE 1D (S1)


CROSSRIDGE PARK
PETER MCEWAN WAREHOUSE - NHRP
CEMETERY
SOUTH GOODRICH PARK
EAST ELEMENTARY SCHOOL
RAILROAD DEPOT HISTORIC PROPERTY
NORTH GOODRICH PARK
720 E. MADISON
738 E. MADISON
HISTORIC PROPERTIES
GOODRICH HOUSE - 742 E. MADISON HISTORIC PROPERTY
MILTON EAST CEMETERY
STH 59 (WEST)
HIGH RD.
ST. MARY ST.
STH 26
STH 26
STH 59 (EAST)
STORRS LAKE RD.
NELSON RD.
BOWERS LAKE RD.
ST. MARY ST.
STH 59 (EAST)
JOHN ALEXANDER WHEAT WAREHOUSE NRHP
220 S. JANESVILLE ST. HISTORIC PROPERTY
GOODRICH BLACKSMITH SHOP - NRHP
WISCONSIN/SOUTHERN RR
MILTON HOUSE - NRHP NATIONAL HISTORIC LANDMARK
STH 59 (WEST)
BOWERS LAKE RD.
N
0' 750' 1500' 3000'
SCALE

NRHP - NATIONAL REGISTER OF HISTORIC PLACES



TYPICAL SECTION - STH 26
4 - LANE URBAN SECTION

* 12' LEFT-TURN LANE AT INTERSECTIONS

32 RELOCATIONS

STH 26 -- JANESVILLE TO WATERTOWN
ROCK, JEFFERSON & DODGE COUNTIES

THROUGH-TOWN ALTERNATIVE 1D (S1)
CITY OF MILTON

FIGURE 2.2.2.3

EARTH TECH COMPUTER AIDED DESIGN & DRAFTING
DATE :Mon Dec 20 14:07:30 2004

Within the City of Milton, access would have been controlled and the number of existing access points substantially reduced consistent with urban arterial design standards. At-grade signalized intersections were proposed at St. Mary Street, STH 59-East, STH 59-West, and Bowers Lake Road. At Nelson Avenue, right-in/right-out access would have been allowed. The remaining roadways and driveways would have been closed to STH 26. Right and left-turn lanes would have been provided at the intersections. Parking would have been prohibited, and driveway access along STH 26 would have been allowed only along frontage roads. Additional frontage roads could have been required to maintain local road access through Milton. The posted speed limit would have been 45-mph (73-km/h) to maintain a desirable operating speed of 40-mph (65-km/h). Under this alternative, the Wisconsin & Southern Railroad crossing at STH 26, located just south of the Milton House, would approach the threshold for consideration of a grade separation structure in design year 2028, but constructing an overhead crossing would directly impact the historic Milton House.

Following the existing corridor, this alternative would have continued northerly adding two additional lanes and a median to the existing roadway from East Bowers Lake Road until connecting with the Fort Atkinson bypass and the beginning of the Central Segment. A diamond interchange was proposed at CTH N because this interchange has been identified as having a high incidence of crashes.

The through-town alternative in the City of Milton was studied on a continuous basis during much of the STH 26 Corridor Study. This alternative was studied in more detail than other preliminary alternatives that were dismissed to more thoroughly understand and weigh the associated impacts and to provide as much time as possible for the public to review and comment on the alternative. The alternative was shown to and discussed with study committees throughout the study. Alternative 1D was shown at the first public information meeting in June 1999 and impacts are shown on Table 2.2.2. After this meeting, Alternative 1D was renamed as Alternative S1 and shown at a second public information meeting in January 2000. Impacts for Alternative S1 are shown on Table 2.2.4.5.

Alternative 1D (S1) would have maximized the use of the existing corridor, resulting in low impacts to farmland and the natural environment near Milton, and would have had the lowest cost. The through town alternative in Milton would be subject to Section 4(f) considerations. The potential impacts on the historic resources (Milton House and eight other sites), as well as the potential impacts on the two parks, were sufficient to conclude that the alternatives carried forward for detailed study (S2 and S3) were feasible and prudent alternatives to Alternative 1D (S1). Historic preservation interests oppose widening the highway in its present location.

This alternative was not carried forward as one of the alternatives for detailed study because it would have had a number of adverse impacts within the City of Milton and because it would not have met project purpose and need requirements on a number of issues as described below.

- **Operating Speeds and Travel Time:** Given the regional importance of STH 26, an alternative that meets the purpose and need requirements for this project must maintain a reasonable average operating speed (~40-mph (65-km/h) urban, ~55-mph (89-km/h) rural). Intersections that remain open and available for 4-way traffic movements would require a signal for safety and effective operations. The through town alternative in Milton would have required four signalized intersections, thereby reducing the average operating speed through town to about 30-mph (48-km/h). With low operating speeds, this alternative does not meet the purpose and need requirements as an effective regional facility. Low operating speeds and increased travel time result in increased pollution and fuel consumption. This alternative does not meet the project purpose and need requirement of reducing congestion and travel time.

- **Truck Volumes:** As a designated truck route, STH 26 also needs to be improved as an efficient and safe truck route. Reducing truck volumes along existing STH 26 within the City of Milton has been an important concern to local residents throughout the study. This alternative does not reduce truck traffic in the city and does not fulfill the project purpose and need as an efficient and safe state truck route.

- **Community Circulation:** STH 26 is approximately one block east of one of Milton's two downtowns and travels through the eastern portion of the city. The existing route separates the majority of residents within Milton from significant assets that are enjoyed by the community at large. These include the Storrs Lake Wildlife Area and associated lakes and hiking areas, two golf courses, and a number of historic resources including the Milton House. With the reduction of cross streets that would have occurred under this alternative, traffic would have been required to circulate to signalized intersections to cross the route. This would have resulted in increased delays on side streets due to the concentration of vehicles at signalized intersections. As traffic volumes continue to increase along STH 26, the internal circulation of the community would have been disrupted. Pedestrian crossing and safety to get to the Milton House would have been adversely impacted. Access to and from the golf courses and the Storrs Lake Wildlife Area would have been hindered because it would have been necessary to cross a heavily trafficked highway to get to them. This alternative would have reduced the access to residential and commercial properties along the route. Alternative 1D (S1) does not meet the project purpose and need of accommodating the local access transportation needs of the community.

Below are other issues raised by the through-town alternative:

- **Historic Sites:** Milton's history is encompassed in the historic buildings within the city, many of which are along STH 26. With the construction of an alternative through town, these buildings would be destroyed or adversely affected. The Milton House, a National Historic Landmark, is located on STH 26. Although this alternative would not directly impact this building, indirect impacts to the Milton House would be associated with this alternative. Approximately 8,000 individuals per year, including many school children, visit the Milton House and the surrounding related buildings. These individuals park their vehicles and school buses in North Goodrich Park across STH 26 from the Milton House. As volumes continue to increase on STH 26, pedestrians would incur increased delay crossing STH 26 and a higher potential for accidents. Additionally, representatives of the Milton House expressed concern that an increase in truck volume through the city would create more vibrations at their site and adversely impact the structural condition of the house. In order to avoid the Milton House on the east side of STH 26, the Goodrich House (eligible for NRHP) along the west side of STH 26 and seven other historic sites would be adversely affected. After the first public information meeting in June 1999, 177 postcards were received from the public stating opposition to the expansion of STH 26 along the existing route through Milton.

- **Local Support:** Through town alternatives have been discussed many times with local communities at study committee and public information meetings. Minimal favorable support has been shown by the way of verbal and written comments received for a through town alternative. After the first public information meeting, 177 postcard comments were received from the public opposing this alternative.

- **Relocations:** This alternative requires widening the existing STH 26 corridor through the city and would have required an estimated total of 32 relocations, of which approximately 27 are within the City of Milton causing significant disruption to the community.

- **Access:** Driveways and side street access disrupt the flow of traffic and present a major safety concern on high volume routes. Crossing or entering traffic on STH 26 at uncontrolled intersections becomes increasingly dangerous as traffic volumes increase on STH 26. In order to provide a safe and efficient transportation system, access at driveways and side streets would have been restricted to either right-in/right-out turns or eliminated completely. Traffic would have been routed to signalized intersections to allow safer movements for left-turns and crossing traffic.

2.2.2.5 Alternative 1E (Carried Forward as Detailed Study Alternative S2) (see Exhibit 5)

Alternative 1E is an alternative that generally follows the existing highway but with a relocated alignment through the eastern part of Milton that was developed to avoid impacts to eight historic properties, two parks, a school, and a cemetery associated with a through-town corridor. This alternative follows and makes use of the existing rural 4-lane divided roadway constructed in 1999 from Janesville northeast until about Town Line Road. The alignment then continues on new alignment curving approximately 2,000 feet (610 m) east of existing STH 26 and the Milton House. North of STH 59-East, the alignment then curves back and crosses the existing STH 26 corridor about 0.3-mile (0.5 km) north of STH 59-West, avoiding two golf courses and residential subdivisions. A grade separation crossing of existing STH 26 is proposed to allow the existing corridor to remain in place, providing access to numerous existing residential homes and the two golf courses north and east of the city. This alternative then curves northerly remaining about 1,000 feet (305 m) west of the existing STH 26 corridor until it rejoins the existing corridor about 0.2-mile (0.3 km) south of Klug Road. Diamond interchanges are proposed west of the city at a relocation of STH 59-East to provide better access between Janesville and Whitewater, and north of the city at a new road extension of Bowers Lake Road.

Following the existing corridor to the end of the South Segment, this alternative continues northerly adding two lanes and a median to the existing roadway. A diamond interchange is proposed at CTH N because this area has been identified as having a high incidence of crashes.

This alternative has low cost, minimizes farmland and natural environment impacts, and provides interchange locations that better serve the City of Milton and their industrial park. This alternative is a prudent and feasible alternative to the Section 4(f) considerations associated with a through town alternative. This alternative also offers a connection of IH 90 (Janesville) to STH 59-East (Whitewater) without passing through Milton. This alternative met the purpose and need requirements for this project and was carried forward for detailed study as Alternative S2.

2.2.2.6 Alternative 1F (Carried Forward as Detailed Study Alternative S3) (see Exhibit 5)

Alternative 1F is an alternative that generally follows the existing highway alignment but includes a near east Milton bypass corridor developed to avoid impacts to eight historic properties, two parks, a school, and a cemetery associated with a through town route. The bypass alignment follows along a narrow corridor between the city and the Storrs Lake Wildlife Area. This alternative follows and makes use of the existing rural four-lane divided roadway constructed in 1999 from Janesville northeast until about Town Line Road. The alignment then continues on new alignment curving to the north and remaining approximately 2,000 feet (610 m) east of existing STH 26, avoiding the Storrs Lake Wildlife Area, two golf courses, and one of two residential subdivisions. This alternative returns to the existing alignment about 1.5 miles (2.4 km) north of Milton near John Paul Road. Diamond interchanges are proposed west of the city at a relocation of STH 59-East, and at Klug Road to the north.

Following the existing corridor, this alternative continues northerly adding two lanes and a median to the existing roadway from John Paul Road until it connects with the Fort Atkinson bypass and the beginning of the Central Segment. A diamond interchange is proposed at CTH N.

This alternative would offer many of the advantages of Alternative 1E including low cost, low farmland and natural environment impacts, and interchanges that better serve the City of Milton and their industrial park. This alternative is also a prudent and feasible alternative to the Section 4(f) considerations associated with a through town alternative along the existing alignment. This alternative would offer a connection of IH 90 (Janesville) to STH 59 East (Whitewater) without passing through Milton. This route would pass close to the Storrs Lake Wildlife Area and would impact a new residential development. This alternative met the purpose and need requirements for this project and was carried forward for detailed study as Alternative S3.

2.2.2.7 Alternative 1G (Dismissed From Further Consideration)

Alternative 1G was an east Milton bypass corridor. It would have followed the Alternative 1F alignment from Janesville to about Klug Road north of Milton, where it would have continued north on new alignment until returning to the existing STH 26 alignment near County Line Road. From there, this alternative would have continued north, adding two lanes and a median to the existing roadway from County Line Road until connecting with the Fort Atkinson bypass.

This alternative had a low cost and served the City of Milton and their industrial park, but this alternative had more farmland and right-of-way conversion than similar Alternative 1F. Since Alternative 1F (S3) was similar to Alternative 1G, and was considered a prudent and feasible alternative that met the purpose and need requirements for this project and had fewer land and other environmental disturbances, Alternative 1G was dismissed from further study.

2.2.2.8 Alternative 1H (Dismissed From Further Consideration)

Alternative 1H included a far east Milton bypass corridor developed to route STH 26 east of the city and the Storrs Lake Wildlife Area. From Janesville, this alternative would have followed the existing rural 4-lane divided roadway northeast to the area of Town Line Road, then continued on new alignment, crossing STH 59 East about 1.5 miles (2.4 km) east of existing STH 26. The alternative would have continued north avoiding the Storrs Lake Wildlife Area, then returned to the existing STH 26 alignment 4.7-miles (7.6-km) north of Milton near County Line Road. From there, this alternative would have continued north, adding two lanes and a median to the existing roadway from County Line Road until connecting with the Fort Atkinson bypass.

Alternative 1H would have had the highest amount of right-of-way conversion, impacts to approximately 396 acres (160 ha) of farmland, and the longest route on relocation. A proposed interchange at CTH N would not have served the City of Milton. Local jurisdictions would have incurred increased maintenance costs, as a significant length of existing STH 26 would remain as a local road. A new stream crossing of Otter Creek would have been required. Other preliminary alternatives existed that were considered prudent and feasible, met the purpose and need requirements for this project, and had less land and other environmental disturbances. For these reasons, this alternative was dismissed from further consideration.

2.2.2.9 Alternative 1JP (Dismissed From Further Consideration)

Alternative 1JP was a near west alternative that was developed to route STH 26 traffic along the CTH Y/John Paul Road corridor through the City of Milton. This alternative would have followed the

existing STH 26 corridor from Janesville northeast about 0.4-mile (0.6-km). At that point the alignment would have followed CTH Y/John Paul Road north through the City of Milton, returning to the existing STH 26 alignment near CTH N north of Milton. Along the CTH Y/John Paul Road corridor, access would have been controlled and the number of existing access points substantially reduced. Diamond interchanges were proposed near CTH Y and existing STH 26 south of Milton, and at CTH N north of Milton. From CTH N, this alternative would have continued north, adding two lanes and a median to the existing roadway until connecting with the Fort Atkinson bypass.

Although Alternative 1JP would have had low farmland impacts, it also had an extremely high number of relocations (110). The corridor has both commercial and residential developments that have access directly onto John Paul Road. Local access would have been restricted and frontage roads would have been utilized. The interchange locations would not have served the City of Milton, and no access would have been provided to STH 59. Alternative 1JP had no local support. This alternative would not meet the purpose and need requirements for this project in providing a transportation system consistent with state planning efforts and the intended highway function as a route of national, state, regional and local importance. It would not have minimized adverse environmental disturbances, particularly in the amount of relocations, and it would not support the local community needs and interests. For these reasons, it was dismissed from further consideration.

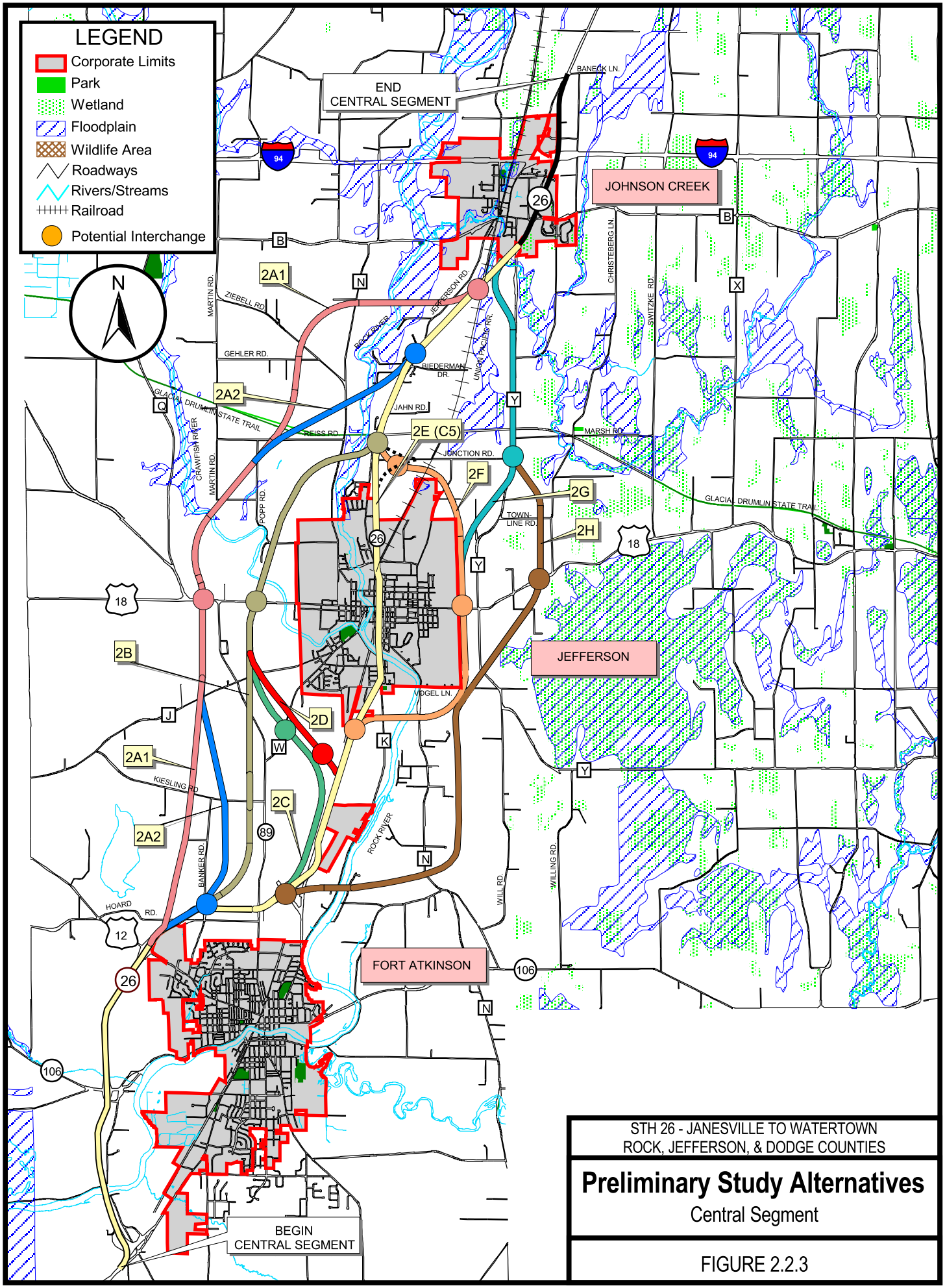
2.2.3 Central Segment (Segment 2)

The central segment preliminary alternatives are described below. See Figure 2.2.3 for map location of the preliminary alternatives, and Table 2.2.3 for a summary of estimated impacts.

2.2.3.1 Alternative 2A1 (Dismissed From Further Consideration)

Alternative 2A1 included a far west Jefferson bypass corridor. It would have diverged from the existing Fort Atkinson bypass alignment about 4.5 miles (7.3 km) south of Jefferson near USH 12. Heading north, the alternative would have crossed USH 18 between STH 89-North and STH 89-South, and returned to the existing STH 26 alignment about 2.8 miles (4.5 km) north of Jefferson. Interchanges were proposed at USH 12 and Hoard Road to the south, at USH 18 to the west, and at Jefferson Road to the north. After joining the existing alignment north of Jefferson, this alternative would have continued north, adding two lanes and a median to the existing roadway before matching the four-lane improvement at Johnson Creek near CTH Y.

Other than providing a reasonable crossing of the Crawfish River, the remaining natural environment impacts of Alternative 2A1 were high. This alternative would have impacted approximately 468 acres (189 ha) of farmland and required approximately 513 acres (208 ha) of right-of-way acquisition. The north and south interchanges would have been located over 3 miles (4.8 km) from the City of Jefferson, offering little benefit to the city or the industrial parks. All west side bypass alternatives would require two river crossings (Rock and Crawfish Rivers) as compared to one river crossing (Rock River) for east side alternatives, and would have a high potential for archeological impacts. Due to the length of route on relocation, local jurisdictions would have incurred increased maintenance costs as a significant length of existing STH 26 would remain. Little or no local support was shown for Alternative 2A1. Other preliminary alternatives existed that met purpose and need requirements for this project and that had fewer environmental disturbances. For these reasons, this alternative was dismissed from further consideration.



STH 26 - JANESVILLE TO WATERTOWN
ROCK, JEFFERSON, & DODGE COUNTIES

Preliminary Study Alternatives

Central Segment

FIGURE 2.2.3

TABLE 2.2.3
SUMMARY OF ESTIMATED IMPACTS FOR PRELIMINARY ALTERNATIVES (June 1999*)
CENTRAL SEGMENT: FORT ATKINSON BYPASS TO JOHNSON CREEK

Study Issues	Unit of Measure	Alternatives								
		2A1	**2A2**	**2B**	**2C** (C1)*	**2D** (C2)*	**2E** (C5)*	**2F** (C3)*	**2G**	**2H** (C4)*
Agricultural Issues										
Number of Farms Affected	Each	35	42	32	27	20	24	34	43	49
Farmland Area Converted to Right-of-Way	Acres (Hectares)	468 (189)	439 (178)	350 (142)	320 (130)	327 (132)	119 (48)	346 (140)	350 (142)	420 (170)
Environmental Issues										
Wetland Area Converted to Right-of-Way	Acres (Hectares)	40 (16)	20 (8)	60 (24)	70 (28)	50 (20)	10 (4)	30 (12)	50 (20)	50 (20)
Flood Plain Area	Low/Med/High	Med	Low	Med	Med	Med	Low	Low	Low	Low
New River/Stream Crossing Locations	Number	2	2	2	2	2	0	1	1	1
Historic Properties	Yes/No	No	No	No	No	No	Yes	No	No	No
Archaeological Potential	Low/Med/High	High	High	High	High	High	Med	Med	Med	Med
Endangered Species	Yes/No	No	No	No	No	No	No	No	No	No
Land Use and Socioeconomic Issues										
Consistency with Municipal Land Use Plans	○⊙●	●	●	●	⊙	○	●	○	●	●
Significant Site Specific Impacts (ex. St. Coletta)	○⊙●	○	○	○	●	●	●	●	●	○
Farmland Preservation Effect	○⊙●	●	●	●	⊙	○	○	⊙	●	●
Community Access	○⊙●	●	●	●	⊙	○	○	○	●	●
Economic Effect on Existing Businesses	○⊙●	●	●	●	⊙	○	●	○	●	●
Servicing of Industrial Parks	○⊙●	●	●	●	⊙	○	○	○	●	●
Residential-Neighborhood Effect	○⊙●	⊙	⊙	○	○	○	●	●	●	●
Traffic										
-- North of USH 18										
Projected STH 26 2028 Average Daily Traffic (ADT) (1)	Vehicles/Day	11,000	11,000	11,500	12,000	12,000	28,000	11,500	11,000	11,000
Estimated ADT Reduction Through Jefferson (2028)	Percent	30 - 40	30 - 40	35 - 45	40 - 50	40 - 50	0	35 - 45	35 - 40	35 - 40
Estimated Truck Volume Reduction Through Jefferson	Percent	40 - 45	40 - 45	40 - 45	40 - 45	45 - 50	0	45-50	40 - 45	40 - 45
Number of Thru Lanes Required Through Jefferson (2)	Existing / Required	2 / 2	2 / 2	2 / 2	2 / 2	2 / 2	2 / 4-div	2 / 2	2 / 2	2 / 2
-- South of USH 18										
Projected STH 26 2028 Average Daily Traffic (ADT) (1)	Vehicles/Day	13,000	13,000	13,500	14,000	14,000	31,000	13,500	13,000	13,000
Estimated ADT Reduction Through Jefferson (2028)	Percent	35 - 45	35 - 45	40 - 45	40 - 50	40 - 50	0	40 - 45	35 - 45	35 - 45
Estimated Truck Volume Reduction Through Jefferson	Percent	40 - 45	40 - 45	40 - 45	40 - 45	45 - 50	0	45 - 50	40 - 45	40 - 45
Number of Thru Lanes Required Through Jefferson (2)	Existing / Required	2 / 2	2 / 2	2 / 2	2 / 2	2 / 2	2 / 4-div	2 / 2	2 / 2	2 / 2
Other Issues										
Total Length	Miles (km)	15.1 (24.3)	15.6 (25.1)	14.4 (23.2)	15.0 (24.1)	15.5 (24.9)	14.8 (23.8)	15.8 (25.4)	15.3 (24.6)	15.5 (24.9)
Total Area Converted to Right-of-Way	Acres (Hectares)	513 (208)	464 (188)	415 (168)	395 (160)	382 (155)	169 (68)	381 (154)	405 (164)	475 (192)
Relocations (Business/Residential)	Each	5	26	32	30	41	135	30	46	45
Preliminary Cost (1999 Dollars)	Million $	$65	$62	$59	$59	$61	$63	$60	$60	$62

* Impacts shown in chart were computed in June 1999 for the preliminary alternatives. Impacts may be different in other charts due to additional information known at a later date. Preliminary Alternative 2E(C5) was studied longer than other preliminary alternatives that were dismissed (See Table 2.2.4.5). Alternatives 2C(C1), 2D(C2), 2F(C3), and 2H(C4) were carried forward as Detailed Study Alternatives (See Table 2.3.3).

(1) ADT shown is at or near the midpoint of projected ADT range along the bypass alternatives or along the existing alignment alternatives.

(2) Represents the number of lanes along existing STH 26 versus the number of lanes required to obtain LOS "D" along the existing route with the construction of each alternative.

○ most beneficial/least negative effect
⊙ moderate
● least beneficial/most negative effect

Note: Symbols represent a relative scale from most beneficial/least negative effect to least beneficial/most negative effect. Each preliminary alternative is classified relative to the other preliminary alternatives within the same segment of the corridor.